

WHAT IS CLAIMED IS:

1. A compound eye imaging system, comprising a plurality of optical blocks and an imaging element for picking-up object images formed by the optical blocks in imaging ranges provided for each optical block, wherein

optical axes of the optical blocks intersect each other at the object side.

2. A compound eye imaging system according to Claim 1, wherein all the optical axes of the plurality of optical blocks roughly intersect each other at one point.

3. A compound eye imaging system according to Claim 2, further comprising a drive means which relatively moves the plurality of optical blocks and the imaging element to change the space between the optical blocks and imaging element.

4. A compound eye imaging system according to Claim 1, wherein a plurality of imaging blocks, which comprise the imaging ranges that are different from each other, are formed in the imaging element.

5. A compound eye imaging system according to Claim 4, wherein the imaging element is constructed so that the plurality of imaging blocks are formed on a single substrate.

6. A compound eye imaging system according to Claim 5, wherein the imaging element is constructed by forming the plurality of imaging blocks on a single semiconductor

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substrate.

7. A compound eye imaging system according to Claim 1, wherein the plurality of optical blocks are unified.

8. A compound eye imaging system according to Claim 1, wherein at least one of the optical action surfaces comprising the plurality of optical blocks has an aspherical shape.

9. A compound eye imaging system according to Claim 8, wherein an optical action surface comprising at least one optical block of the plurality of optical blocks has a rotational asymmetric aspherical shape.

10. A compound eye imaging system according to Claim 1, wherein at least one of the optical action surfaces comprising the plurality of optical blocks is a diffraction action surface.

11. An imaging device, comprising the compound eye imaging system according to Claim 1.

12. An imaging device according to Claim 11, wherein a distance to an object is measured based on outputs from a pair of imaging ranges for picking-up an image of the object through a pair of optical blocks in the imaging element.

13. An imaging device according to Claim 11, wherein an average value of distances to an object is measured based on outputs from multiple pairs of imaging ranges for picking-up an image of the object through multiple pairs of optical

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blocks in the imaging element.

14. An imaging device according to Claim 11, wherein an object image is synthesized by picking-up images of an object that is more distant than the intersection of the optical axes of the optical blocks by the imaging element.

15. An electronic equipment, comprising the imaging device according to any of Claims 11 through 14.

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